

SEQUENCE LISTING

<110> Allen, Steve
Helentjaris, Tim
Hitz, Bill
Kinney, Tony
Tingey, Scott

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Tyr Ile Leu Leu Leu Ala Arg Leu Ile Asp Gly Phe Gly Ile Gly Leu
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Ile Gly Asn Leu Leu Gln Gly Trp Asp Asn Ala Thr Ile Ala Gly Ala
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Val Leu Tyr Ile Lys Lys Glu Phe Asn Leu His Ser Asp Pro Leu Ile
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Ala Ile Gly Leu Ala Gly Val Phe Gly Ile Tyr Ala Val Val Cys Ile
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 35 40 45
 Met Ser Leu Ile Gly Ala Thr Val Ile Thr Thr Cys Ser Gly Pro Ile
 50 55 60
 Ala Asp Trp Leu Gly Arg Arg Pro Met Met Ile Ile Ser Ser Val Leu
 65 70 75 80
 Tyr Phe Leu Gly Gly Leu Val Met Leu Trp Ser Pro Asn Val Tyr Val
 85 90 95
 Leu Cys Leu Ala Arg Leu Leu Asp Gly Phe Gly Ile Gly Leu Ala Val
 100 105 110
 Thr Leu Val Pro Val Tyr Ile Ser Glu Thr Ala Pro Ser Glu Ile Arg
 115 120 125
 Gly Ser Leu Asn Thr Leu Pro Gln Phe Ser Gly Ser Gly Gly Met Phe
 130 135 140
 Leu Ser Tyr Cys Met Val Phe Gly Met Ser Leu Ser Pro Ala Pro Ser
 145 150 155 160
 Trp Arg Leu Met Leu Gly Val Leu Ser Ile Pro Ser Leu Leu Tyr Phe
 165 170 175
 Ala Leu Thr Ile Phe Phe Leu Pro Glu Ser Pro Arg Trp Leu Val Ser
 180 185 190
 Lys Gly Arg Met Leu Glu Ala Lys Lys Val Leu Gln Arg Leu Arg Gly
 195 200 205
 Arg Glu Asp Val Ser Gly Glu Met Ala Leu Leu Val Glu Gly Leu Gly
 210 215 220
 Ile Gly Gly Asp Thr Ser Ile Glu Glu Tyr Ile Ile Gly Pro Ala Asp
 225 230 235 240
 Asp Val Ala Asp Gly His Glu His Ala Thr Glu Lys Asp Lys Ile Arg
 245 250 255
 Leu Tyr Gly Ser Gln Ala Gly Leu Ser Trp Leu Ser Lys Pro Val Thr
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 Gly Gln Ser Ser Ile Gly Leu Ala Ser His His Gly Ser Ile Ile Asn
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Gln Ser Met Pro Leu Met Asp Pro Leu Val Thr Leu Phe Gly Ser Ile
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 Tyr Met Ser Asp Ala Thr Arg Gly Asp Ser Asp Asp Asn Leu His Ser
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 Pro Leu Ile Ser Arg Gln Thr Thr Ser Leu Glu Lys Asp Leu Pro Pro
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 Pro Pro Ser His Gly Ser Ile Leu Gly Ser Met Arg Arg His Ser Ser
 385 390 395 400
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 Gln Gln Gly Gly Phe Lys Arg Ile Tyr Leu His Glu Glu Gly Val Ser
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 Val Gln Ala Ala Ala Leu Val Ser Gln Pro Ala Leu Tyr Ser Lys Glu
 465 470 475 480
 Leu Ile Asp Gly His Pro Val Gly Pro Ala Met Val His Pro Ser Glu
 485 490 495
 Thr Ala Ser Lys Gly Pro Ser Trp Lys Ala Leu Leu Glu Pro Gly Val
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 Lys His Ala Leu Val Val Gly Val Gly Ile Gln Ile Leu Gln Gln Phe
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 Ala Gly Val Glu Val Leu Leu Ser Asp Ile Gly Ile Gly Ser Glu Ser
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 Ile Gly Val Ala Met Lys Leu Met Asp Val Ser Gly Arg Arg Gln Leu
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Ile Gly Ser Leu Val Asn Phe Gly Asn Val Ala His Ala Ala Ile Ser
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Thr Val Cys Val Val Val Tyr Phe Cys Cys Phe Val Met Gly Tyr Gly
625 630 635 640

Pro Ile Pro Asn Ile Leu Cys Ser Glu Ile Phe Pro Thr Arg Val Arg
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Gly Leu Cys Ile Ala Ile Cys Ala Leu Val Phe Trp Ile Gly Asp Ile
660 665 670

Ile Ile Thr Tyr Ser Leu Pro Val Met Leu Gly Ser Leu Gly Leu Gly
675 680 685

Gly Val Phe Ala Ile Tyr Ala Val Val Cys Phe Ile Ser Trp Ile Phe
690 695 700

Val Phe Leu Lys Val Pro Glu Thr Lys Gly Met Pro Leu Glu Val Ile
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Glu

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<212> DNA
<213> Glycine max

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 <213> Glycine max

<400> 10

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Leu	Val	Ser	Arg	Lys	Gly	Ser	Met	Ala	Asn	Pro	Ser	Ser	Leu	Val	Asp
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Pro	Leu	Val	Thr	Leu	Phe	Gly	Ser	Val	His	Glu	Lys	Leu	Pro	Glu	Thr
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Asn	Gln	Pro	Arg	Asn	Glu	Asp	Trp	Asp	Glu	Glu	Ser	Leu	Ala	Arg	Glu
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Gly	Asp	Asp	Tyr	Val	Ser	Asp	Ala	Gly	Asp	Ser	Asp	Asp	Asn	Leu	Gln
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Pro	His	Ala	His	Ser	Asn	Leu	Ala	Ser	Met	Arg	Gln	Gly	Ser	Leu	Leu
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Ile	His	Pro	Ser	Glu	Thr	Ile	Ala	Lys	Gly	Pro	Ser	Trp	Ser	Asp	Leu
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Phe	Glu	Pro	Gly	Val	Lys	His	Ala	Leu	Ile	Val	Gly	Val	Gly	Met	Gln
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 Gln Ile Leu Glu Gln Ala Gly Val Gly Tyr Leu Leu Ser Ser Leu Gly
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 Gly Arg Arg Thr Leu Leu Leu Ser Thr Ile Pro Val Leu Ile Ala Ala
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 Asn Ala Ser Ile Ser Thr Ile Ser Val Ile Val Tyr Phe Cys Phe Phe
 370 375 380
 Val Met Gly Phe Gly Pro Ile Pro Asn Ile Leu Cys Ala Glu Ile Phe
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 Pro Thr Arg Val Arg Gly Leu Cys Ile Ala Ile Cys Ala Leu Thr Phe
 405 410 415
 Trp Ile Cys Asp Ile Ile Val Thr Tyr Thr Leu Pro Val Met Leu Asn
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 Ser Val Gly Leu Ala Gly Val Phe Gly Ile Tyr Ala Val Val Cys Phe
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 Ile Ala Trp Val Phe Val Phe Leu Lys Val Pro Glu Thr Lys Gly Met
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 <213> Triticum aestivum

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 <213> Triticum aestivum

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 Thr Arg Gly Leu Pro Leu Leu Gly Leu Leu His Leu Ile Ser Leu Val
 35 40 45
 Gly Ser Leu Leu Glu Arg Arg Ser Cys Arg Asp Pro Trp Trp Arg Gly
 50 55 60
 Gly Lys Lys Met Ser Gly Ala Ala Leu Val Ala Ile Ala Ala Ser Ile
 65 70 75 80
 Gly Asn Leu Leu Gln Gly Trp Asp Asn Ala Thr Ile Ala Gly Ala Val
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 Gly Leu Ile Val Ala
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<210> 13
 <211> 1487

<212> DNA
<213> Triticum aestivum

<400> 13

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<212> PRT
<213> Triticum aestivum

<400> 14

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Lys Lys Glu Gly Gly Phe Lys Arg Ile Tyr Leu His Gln Glu Gly Val
  35                      40                      45

Ala Asp Ser Arg Arg Gly Ser Val Val Ser Leu Pro Gly Gly Gly Asp
  50                      55                      60

Ala Thr Gln Gly Gly Ser Gly Phe Ile His Ala Ala Ala Leu Val Ser
  65                      70                      75                      80

His Ser Ala Leu Tyr Ser Lys Asp Leu Met Glu Glu Arg Met Ala Ala
  85                      90                      95

Gly Pro Ala Met Ile His Pro Leu Glu Ala Ala Pro Lys Gly Ser Ile
  100                      105                      110

Trp Lys Asp Leu Phe Glu Pro Gly Val Arg Arg Ala Leu Phe Val Gly
  115                      120                      125
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Val Gly Ile Gln Met Leu Gln Gln Phe Ala Gly Ile Asn Gly Val Leu
130 135 140

Tyr Tyr Thr Pro Gln Ile Leu Glu Gln Ala Gly Val Ala Val Leu Leu
145 150 155 160

Ser Asn Leu Gly Leu Ser Ser Ala Ser Ala Ser Ile Leu Ile Ser Ser
165 170 175

Leu Thr Thr Leu Leu Met Leu Pro Ser Ile Gly Val Ala Met Arg Leu
180 185 190

Met Asp Ile Ser Gly Arg Arg Phe Leu Leu Leu Gly Thr Ile Pro Ile
195 200 205

Leu Ile Ala Ser Leu Ile Val Leu Gly Val Val Asn Val Ile Asn Leu
210 215 220

Ser Thr Val Pro His Ala Val Leu Ser Thr Val Ser Val Ile Val Tyr
225 230 235 240

Phe Cys Cys Phe Val Met Gly Phe Gly Pro Ile Pro Asn Ile Leu Cys
245 250 255

Ala Glu Ile Phe Pro Thr Arg Val Arg Gly Val Cys Ile Ala Ile Cys
260 265 270

Ala Leu Thr Phe Trp Ile Cys Asp Ile Ile Val Thr Tyr Ser Leu Pro
275 280 285

Val Met Leu Asn Ala Ile Gly Leu Ala Gly Val Phe Gly Ile Tyr Ala
290 295 300

Val Val Cys Cys Ile Ala Phe Val Phe Val Tyr Leu Lys Val Pro Glu
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Thr Lys Gly Met Pro Leu Glu Val Ile Thr Glu Phe Phe Ala Val Gly
325 330 335

Ala Lys Gln Ala Gln Ala Thr Ile Ala
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<212> DNA
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<211> 228
<212> PRT
<213> Triticum aestivum

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Ile Leu Glu Gln Ala Gly Val Gly Val Leu Leu Ser Asn Ile Gly Leu
35 40 45
Ser Ser Ser Ser Ala Ser Ile Leu Ile Ser Ala Leu Thr Thr Leu Leu
50 55 60
Met Leu Pro Ser Ile Gly Ile Ala Met Arg Leu Met Asp Met Ser Gly
65 70 75 80
Arg Arg Phe Leu Leu Leu Ser Thr Ile Pro Val Leu Ile Val Ala Leu
85 90 95
Ala Val Leu Val Leu Val Asn Val Leu Asp Val Gly Thr Met Val His
100 105 110
Ala Ala Leu Ser Thr Ile Ser Val Ile Val Tyr Phe Cys Phe Phe Val
115 120 125
Met Gly Phe Gly Pro Ile Pro Asn Ile Leu Cys Ala Glu Ile Phe Pro
130 135 140
Thr Ser Val Arg Gly Ile Cys Ile Ala Ile Cys Ala Leu Thr Phe Trp
145 150 155 160
Ile Gly Asp Ile Ile Val Thr Tyr Thr Leu Pro Val Met Leu Asn Ala
165 170 175
Ile Gly Leu Ala Gly Val Phe Gly Ile Tyr Ala Ile Val Cys Val Leu
180 185 190
Ala Phe Val Phe Val Tyr Met Lys Val Pro Glu Thr Lys Gly Met Pro
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Leu Glu Val Ile Thr Glu Phe Phe Ser Val Gly Ala Lys Gln Gly Lys
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Glu Ala Thr Asp
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<211> 615

<212> DNA
<213> Zea mays

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<213> Zea mays

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Cys Xaa Ile Leu Ala Ser Met Thr Ser Ile Leu Leu Gly Tyr Asp Ile
 35 40 45

Gly Val Met Ser Gly Ala Ser Leu Tyr Ile Lys Lys Asp Leu Lys Ile
 50 55 60

Ser Asp Val Lys Leu Glu Ile Leu Met Gly Ile Leu Asn Val Tyr Ser
 65 70 75 80

Leu Ile Gly Ser Xaa Ala Ala Gly Arg Thr Ser Asp Trp Ile Gly Arg
 85 90 95

Arg Xaa Thr Ile Val Phe Ala Ala Val Ile Phe Phe Ala Gly Ala Xaa
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Leu Met Gly Phe Ala Val Asn Tyr Trp Met Leu Met Phe Gly Arg Phe
 115 120 125

Val Ala Gly Ile Gly Val Gly Tyr Ala Leu Met Ile Ala Thr Val Tyr
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Thr Ala Glu Val Ser Pro Xaa Ser Ala Arg Gly Phe Leu Thr Ser Phe
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Pro Glu Val Phe Ile Thr Ser
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<210> 19
 <211> 1914
 <212> DNA
 <213> Zea mays

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taacaaaaat tcttcgctt gctttgcaag ccaaaaaaaa aaaaaaaaaa aaaa 1914

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<210> 20
<211> 513
<212> PRT
<213> Zea mays

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 20         25         30
Val Ile Leu Gly Tyr Asp Ile Gly Val Met Ser Gly Ala Ala Met Tyr
 35         40         45
Ile Lys Lys Asp Leu Asn Ile Thr Asp Val Gln Leu Glu Ile Leu Ile
 50         55         60
Gly Ile Leu Ser Leu Tyr Ser Leu Phe Gly Ser Phe Ala Gly Ala Arg
 65         70         75         80
Thr Ser Asp Arg Ile Gly Arg Arg Leu Thr Val Val Phe Ala Ala Val
 85         90         95
Ile Phe Phe Val Gly Ser Leu Leu Met Gly Phe Ala Val Asn Tyr Gly
100        105        110
Met Leu Met Ala Gly Arg Phe Val Ala Gly Val Gly Val Gly Tyr Gly
115        120        125
Gly Met Ile Ala Pro Val Tyr Thr Ala Glu Ile Ser Pro Ala Ala Ser
130        135        140

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Arg Gly Phe Leu Thr Thr Phe Pro Glu Val Phe Ile Asn Ile Gly Ile
145 150 155 160

Leu Leu Gly Tyr Leu Ser Asn Phe Ala Phe Ala Arg Leu Pro Leu His
165 170 175

Leu Gly Trp Arg Val Met Leu Ala Ile Gly Ala Val Pro Ser Gly Leu
180 185 190

Leu Ala Leu Leu Val Phe Cys Met Pro Glu Ser Pro Arg Trp Leu Val
195 200 205

Leu Lys Gly Arg Leu Ala Asp Ala Arg Ala Val Leu Glu Lys Thr Ser
210 215 220

Ala Thr Pro Glu Glu Ala Ala Glu Arg Leu Ala Asp Ile Lys Ala Ala
225 230 235 240

Ala Gly Ile Pro Lys Gly Leu Asp Gly Asp Val Val Thr Val Pro Gly
245 250 255

Lys Glu Gln Gly Gly Gly Glu Leu Gln Val Trp Lys Lys Leu Ile Leu
260 265 270

Ser Pro Thr Pro Ala Val Arg Arg Ile Leu Leu Ser Ala Val Gly Leu
275 280 285

His Phe Phe Gln Gln Ala Ser Gly Ser Asp Ser Val Val Gln Tyr Ser
290 295 300

Ala Arg Leu Phe Lys Ser Ala Gly Ile Thr Asp Asp Asn Lys Leu Leu
305 310 315 320

Gly Val Thr Cys Ala Val Gly Val Thr Lys Thr Phe Phe Ile Leu Val
325 330 335

Ala Thr Phe Leu Leu Asp Arg Ala Gly Arg Arg Pro Leu Leu Leu Ile
340 345 350

Ser Thr Gly Gly Met Ile Val Ser Leu Ile Cys Leu Gly Ser Gly Leu
355 360 365

Thr Val Ala Gly His His Pro Asp Thr Lys Val Ala Trp Ala Val Ala
370 375 380

Leu Cys Ile Ala Ser Thr Leu Ser Tyr Ile Ala Phe Phe Ser Ile Gly
385 390 395 400

Leu Gly Pro Ile Thr Gly Val Tyr Thr Ser Glu Ile Phe Pro Leu Gln
405 410 415

Val Arg Ala Leu Gly Phe Ala Val Gly Val Ala Ser Asn Arg Val Thr
420 425 430

Ser Ala Val Ile Ser Met Thr Phe Leu Ser Leu Ser Lys Ala Ile Thr
435 440 445

Ile Gly Gly Ser Phe Phe Leu Tyr Ser Gly Ile Ala Ala Val Ala Trp
450 455 460

Val Phe Phe Phe Thr Cys Leu Pro Glu Thr Arg Gly Arg Thr Leu Glu
 465 470 475 480

Glu Met Gly Lys Leu Phe Gly Met Pro Asp Thr Gly Met Ala Glu Glu
 485 490 495

Ala Glu Asp Ala Ala Ala Lys Glu Lys Val Val Glu Leu Pro Ser Ser
 500 505 510

Lys

<210> 21
 <211> 2017
 <212> DNA
 <213> Oryza sativa

<400> 21
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 2017

<210> 22
 <211> 510
 <212> PRT
 <213> Oryza sativa

<220>

<221> UNSURE

<222> (102)

<400> 22

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Ile Leu Leu Gly Tyr Asp Ile Gly Val Met Ser Gly Ala Ser Leu Tyr
35 40 45
Ile Lys Lys Asp Phe Asn Ile Ser Asp Gly Lys Val Glu Val Leu Met
50 55 60
Gly Ile Leu Asn Leu Tyr Ser Leu Ile Gly Ser Phe Ala Ala Gly Arg
65 70 75 80
Thr Ser Asp Trp Ile Gly Arg Arg Tyr Thr Ile Val Phe Ala Ala Val
85 90 95
Ile Phe Phe Ala Gly Xaa Phe Leu Met Gly Phe Ala Val Asn Tyr Ala
100 105 110
Met Leu Met Phe Gly Arg Phe Val Ala Gly Ile Gly Val Gly Tyr Ala
115 120 125
Leu Met Ile Ala Pro Val Tyr Thr Ala Glu Val Ser Pro Ala Ser Ala
130 135 140
Arg Gly Phe Leu Thr Ser Phe Pro Glu Val Phe Ile Asn Phe Gly Ile
145 150 155 160
Leu Leu Gly Tyr Val Ser Asn Tyr Ala Phe Ser Arg Leu Pro Leu Asn
165 170 175
Leu Gly Trp Arg Ile Met Leu Gly Ile Gly Ala Ala Pro Ser Val Leu
180 185 190
Leu Ala Leu Met Val Leu Gly Met Pro Glu Ser Pro Arg Trp Leu Val
195 200 205
Met Lys Gly Arg Leu Ala Asp Ala Lys Val Val Leu Glu Lys Thr Ser
210 215 220
Asp Thr Ala Glu Glu Ala Ala Glu Arg Leu Ala Asp Ile Lys Ala Ala
225 230 235 240
Ala Gly Ile Pro Glu Glu Leu Asp Gly Asp Val Val Thr Val Pro Lys
245 250 255
Arg Gly Ser Gly Asn Glu Lys Arg Val Trp Lys Glu Leu Ile Leu Ser
260 265 270
Pro Thr Pro Ala Met Arg Arg Ile Leu Leu Ser Gly Ile Gly Ile His
275 280 285

Phe Phe Gln His Ala Leu Gly Ile His Ser Val Val Phe Tyr Ser Pro
 290 295 300
 Leu Val Phe Lys Ser Pro Gly Leu Thr Asn Asp Lys His Phe Leu Gly
 305 310 315 320
 Thr Thr Trp Pro Phe Gly Val Thr Lys Arg Leu Phe Ile Leu Leu Ala
 325 330 335
 Thr Phe Phe Ile Asp Gly Val Gly Arg Arg Pro Leu Leu Leu Gly Ser
 340 345 350
 Thr Gly Gly Ile Ile Leu Ser Leu Ile Gly Leu Gly Ala Gly Leu Thr
 355 360 365
 Val Val Gly Gln His Pro Asp Ala Lys Ile Pro Trp Ala Ile Gly Leu
 370 375 380
 Ser Ile Ala Ser Thr Leu Ala Tyr Val Ala Phe Phe Ser Ile Gly Leu
 385 390 395 400
 Gly Pro Ile Thr Trp Val Tyr Ser Ser Glu Ile Phe Pro Leu Gln Val
 405 410 415
 Arg Ala Leu Gly Cys Ser Leu Gly Val Ala Ala Asn Arg Val Thr Ser
 420 425 430
 Gly Val Ile Ser Met Thr Phe Leu Ser Leu Ser Lys Ala Ile Thr Ile
 435 440 445
 Gly Gly Ser Phe Phe Leu Tyr Ser Gly Ile Ala Ala Leu Ala Trp Val
 450 455 460
 Phe Phe Tyr Thr Tyr Leu Pro Glu Thr Arg Gly Arg Thr Leu Glu Glu
 465 470 475 480
 Met Ser Lys Leu Phe Gly Asp Thr Ala Ala Ala Ser Glu Ser Asp Glu
 485 490 495
 Pro Ala Lys Glu Lys Lys Lys Val Glu Met Ala Ala Thr Asn
 500 505 510

<210> 23
 <211> 1853
 <212> DNA
 <213> Glycine max

<400> 23
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 caccgccgag gtctccccgg cctcctctcg tggttctctc acttctctcc ctgaggtatt 660
 tattaatgga gggatattaa ttggatacat atcaaactat gcattttcga agctgacact 720


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aatgagtatt gggacatcca gtaatagtga agtaatttcg tgattttttt ttgtgttttt 1800
actttttaga ctagtctctc aaatcaaaac gagaagttaa agtgaaaaaa aaa 1853

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<210> 24
<211> 523
<212> PRT
<213> Glycine max

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<400> 24
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Gln Asp Phe Asp Pro Pro Lys Lys Arg Lys Arg Asn Lys Tyr Ala Phe
      20          25          30

Ala Cys Ala Met Leu Ala Ser Met Thr Ser Ile Leu Leu Gly Tyr Asp
      35          40          45

Ile Gly Val Met Ser Gly Ala Ala Ile Tyr Ile Lys Arg Asp Leu Lys
      50          55          60

Val Ser Asp Glu Gln Ile Glu Ile Leu Leu Gly Ile Ile Asn Leu Tyr
      65          70          75          80

Ser Leu Ile Gly Ser Cys Leu Ala Gly Arg Thr Ser Asp Trp Ile Gly
      85          90          95

Pro Arg Tyr Thr Ile Val Phe Ala Gly Thr Ile Phe Phe Val Gly Ala
      100          105          110

Leu Leu Met Gly Phe Ser Pro Asn Tyr Ser Phe Leu Met Phe Gly Arg
      115          120          125

Phe Val Ala Gly Ile Gly Ile Gly Tyr Ala Leu Met Ile Ala Pro Val
      130          135          140

Tyr Thr Ala Glu Val Ser Pro Ala Ser Ser Arg Gly Phe Leu Thr Ser
      145          150          155          160

Phe Pro Glu Val Phe Ile Asn Gly Gly Ile Leu Ile Gly Tyr Ile Ser
      165          170          175

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Asn	Tyr	Ala	Phe	Ser	Lys	Leu	Thr	Leu	Lys	Val	Gly	Trp	Arg	Met	Met	
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Leu	Gly	Val	Gly	Ala	Ile	Pro	Ser	Val	Leu	Leu	Thr	Val	Gly	Val	Leu	
		195					200					205				
Ala	Met	Pro	Glu	Ser	Pro	Arg	Trp	Leu	Val	Met	Arg	Gly	Arg	Leu	Gly	
	210					215					220					
Glu	Ala	Arg	Lys	Val	Leu	Asn	Lys	Thr	Ser	Asp	Ser	Lys	Glu	Glu	Ala	
225					230					235					240	
Gln	Leu	Arg	Leu	Ala	Glu	Ile	Lys	Gln	Ala	Ala	Gly	Ile	Pro	Glu	Ser	
				245				250						255		
Cys	Asn	Asp	Asp	Val	Val	Gln	Val	Asn	Lys	Gln	Ser	Asn	Gly	Glu	Gly	
		260						265					270			
Val	Trp	Lys	Glu	Leu	Phe	Leu	Tyr	Pro	Thr	Pro	Ala	Ile	Arg	His	Ile	
		275					280						285			
Val	Ile	Ala	Ala	Leu	Gly	Ile	His	Phe	Phe	Gln	Gln	Ala	Ser	Gly	Val	
	290					295					300					
Asp	Ala	Val	Val	Leu	Tyr	Ser	Pro	Arg	Ile	Phe	Glu	Lys	Ala	Gly	Ile	
305					310					315					320	
Thr	Asn	Asp	Thr	His	Lys	Leu	Leu	Ala	Thr	Val	Ala	Val	Gly	Phe	Val	
				325					330					335		
Lys	Thr	Val	Phe	Ile	Leu	Ala	Ala	Thr	Phe	Thr	Leu	Asp	Arg	Val	Gly	
			340					345					350			
Arg	Arg	Pro	Leu	Leu	Leu	Ser	Ser	Val	Gly	Gly	Met	Val	Leu	Ser	Leu	
		355					360					365				
Leu	Thr	Leu	Ala	Ile	Ser	Leu	Thr	Val	Ile	Asp	His	Ser	Glu	Arg	Lys	
	370					375					380					
Leu	Met	Trp	Ala	Val	Gly	Ser	Ser	Ile	Ala	Met	Val	Leu	Ala	Tyr	Val	
385					390					395					400	
Ala	Thr	Phe	Ser	Ile	Gly	Ala	Gly	Pro	Ile	Thr	Trp	Val	Tyr	Ser	Ser	
				405				410						415		
Glu	Ile	Phe	Pro	Leu	Arg	Leu	Arg	Ala	Gln	Gly	Ala	Ala	Ala	Gly	Val	
			420					425					430			
Ala	Val	Asn	Arg	Thr	Thr	Ser	Ala	Val	Val	Ser	Met	Thr	Phe	Leu	Ser	
		435					440					445				
Leu	Thr	Arg	Ala	Ile	Thr	Ile	Gly	Gly	Ala	Phe	Phe	Leu	Tyr	Cys	Gly	
	450					455					460					
Ile	Ala	Thr	Val	Gly	Trp	Ile	Phe	Phe	Tyr	Thr	Val	Leu	Pro	Glu	Thr	
465					470					475					480	
Arg	Gly	Lys	Thr	Leu	Glu	Asp	Met	Glu	Gly	Ser	Phe	Gly	Thr	Phe	Arg	
				485					490					495		

Ser Lys Ser Asn Ala Ser Lys Ala Val Glu Asn Glu Asn Gly Gln Val
500 505 510

Ala Gln Val Gln Leu Gly Thr Asn Val Gln Thr
515 520

<210> 25
<211> 2089
<212> DNA
<213> Triticum aestivum

<400> 25
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atattaagta tgtgtattgt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2089

<210> 26
<211> 539
<212> PRT
<213> Triticum aestivum

<400> 26
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Ala Ala Ser Arg Gly Ala Ser Ser Thr Met Asp Arg Ala Ala Leu Pro
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Ala Thr Asn Thr Val Phe Ile Leu Val Ala Thr Phe Leu Leu Asp Arg
355 360 365

Ile Arg Arg Arg Pro Leu Val Leu Thr Ser Thr Gly Gly Met Leu Val
370 375 380

Ser Leu Val Gly Leu Ala Thr Gly Leu Thr Val Ile Ser Arg His Pro
385 390 395 400

Asp Glu Lys Ile Thr Trp Ala Ile Val Leu Cys Ile Phe Cys Ile Met
405 410 415

Ala Tyr Val Ala Phe Phe Ser Ile Gly Leu Gly Pro Ile Thr Trp Val
420 425 430

Tyr Ser Ser Glu Ile Phe Pro Leu His Val Arg Ala Leu Gly Cys Ser
435 440 445

Leu Gly Val Ala Val Asn Arg Leu Thr Ser Gly Val Ile Ser Met Thr
450 455 460

Phe Ile Ser Leu Ser Lys Ala Met Thr Ile Gly Gly Ala Phe Phe Leu
465 470 475 480

Phe Ala Gly Ile Ala Ser Phe Ala Trp Val Phe Phe Phe Ala Tyr Leu
485 490 495

Pro Glu Thr Arg Gly Arg Thr Leu Glu Asp Met Ser Ser Leu Phe Gly
500 505 510

Asn Thr Ala Thr His Lys Gln Gly Ala Ala Glu Ala Asp Asp Asp Ala
515 520 525

Gly Glu Lys Lys Val Glu Met Ala Ala Thr Asn
530 535

<210> 27
<211> 1872
<212> DNA
<213> Triticum aestivum

<400> 27
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 Arg Val Thr Ser Ala Ala Val Ser Met Ser Phe Leu Ser Leu Ser Lys
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Tyr Val Leu Leu Leu Gly Arg Leu Leu Asp Gly Phe Gly Val Gly Leu
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Val Val Thr Leu Val Pro Ile Tyr Ile Ser Glu Thr Ala Pro Pro Glu
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Phe Phe Phe Leu Thr Val Phe Phe Leu Pro Glu Ser Pro Arg Trp Leu
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Ala Asp Glu Val Thr Asp Asp His Asp Ile Ala Val Asp Lys Asp Gln
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 Met Ser Arg Arg Gln Gly Ser Leu Ile Asp Pro Leu Val Thr Leu Phe
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Phe Leu Met Val Gly Arg Phe Val Thr Gly Ile Gly Val Gly Tyr Ala
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Val Ile Ser Ile Phe Phe Leu Pro Leu Ser His Lys Ile Thr Thr Gly
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His Glu Leu Phe Glu Asp Phe Arg Trp Arg Glu Ser Phe Pro Gly Asn
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Ser Glu Ile Ala Pro Ser Glu Ile Arg Gly Leu Leu Asn Thr Leu Pro
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aggtcgcggg cggcggtatc cgccggcctc gagatggcca acctgcgcgg cggcgctcggg 300
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gaagatattc cattggagaa ggttcaagtt aaatcctcag gacatgttct gccatatgtt 420
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cttgaatata tcgcgaagga tcttgggatt gctgaaaatg ctgtcttgca ggggtgggtg 540
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aaatttgggc ggacaagaac attcatcctg gatgcagtc cacttgctct aggtgcattc 660
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gctgtagttc catccattct gctggctgta ggaatggcct tttcgctga aagccctcgt 960
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agcatccttg gacctggaga ctctttctag tttcatgtag ttttagaaat aagcgaacgg 1860
caagagtacc aatcttaggt gacttgggtg gggttgtgtc tgaaataagt gaattggatt 1920
gtagaatttc agaaataagt gaattggatt gtagaatttc aaaaagtgtg ttccctttaa 1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040
aaaaaaaaaa aaaaaaaaaa aaa 2063

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<210> 34

<211> 571

<212> PRT

<213> Zea mays

<400> 34

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Asn Leu Leu Leu Leu Ile Phe Gly Pro Phe His Phe Ile Arg Cys Thr
 1             5             10             15

Arg Arg Cys Arg Cys Gln His Gly Thr Ile Thr Thr Val Ile Lys Lys
      20             25             30

Met Met Arg Cys Ala Ala Thr Gly Gly Gly Cys Val Ala Ser Trp Ser
      35             40             45

Gly Asp Arg Arg Leu Pro Ala Val Asn Pro Cys Ser Val Arg Met Pro
      50             55             60

Thr Gly Asn Asp Gly Trp Cys Ala Gly Leu Arg Ser Arg Ala Ala Asp
      65             70             75             80

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Leu Ala Gly Leu Glu Met Ala Asn Leu Arg Gly Gly Val Gly Gly Leu
 85 90 95
 Phe Arg Ala Ser Pro Arg Tyr Gly Arg Leu Gln Ala Thr Ala Ala Val
 100 105 110
 Asp Pro Glu Asp Ile Pro Leu Glu Lys Val Gln Val Lys Ser Ser Gly
 115 120 125
 His Val Leu Pro Tyr Val Gly Val Ala Cys Leu Gly Ala Ile Leu Phe
 130 135 140
 Gly Tyr His Leu Gly Val Val Asn Gly Ala Leu Glu Tyr Leu Ala Lys
 145 150 155 160
 Asp Leu Gly Ile Ala Glu Asn Ala Val Leu Gln Gly Trp Val Val Ser
 165 170 175
 Thr Ser Leu Ala Gly Ala Thr Leu Gly Ser Phe Thr Gly Gly Ser Leu
 180 185 190
 Ala Asp Lys Phe Gly Arg Thr Arg Thr Phe Ile Leu Asp Ala Val Pro
 195 200 205
 Leu Ala Leu Gly Ala Phe Leu Ser Ala Thr Ala Gln Asp Ile Arg Thr
 210 215 220
 Met Ile Ile Gly Arg Leu Leu Ala Gly Ile Gly Ile Gly Val Ser Ser
 225 230 235 240
 Ala Leu Val Pro Leu Tyr Ile Ser Glu Ile Ser Pro Thr Glu Ile Arg
 245 250 255
 Gly Thr Leu Gly Thr Val Asn Gln Leu Phe Ile Cys Ile Gly Ile Leu
 260 265 270
 Ala Ala Leu Leu Ala Gly Leu Pro Leu Ala Gly Asn Pro Ala Trp Trp
 275 280 285
 Arg Thr Met Phe Gly Ile Ala Val Val Pro Ser Ile Leu Leu Ala Val
 290 295 300
 Gly Met Ala Phe Ser Pro Glu Ser Pro Arg Trp Leu Phe Gln Gln Gly
 305 310 315 320
 Lys Val Thr Gln Ala Glu Leu Ala Val Lys Arg Leu Tyr Gly Lys Glu
 325 330 335
 Met Val Thr Glu Ile Met Phe Asp Leu Arg Ala Ser Gly Gln Ser Ser
 340 345 350
 Ser Glu Ser Glu Ala Gly Trp Phe Asp Leu Phe Ser Lys Arg Tyr Trp
 355 360 365
 Lys Val Val Ser Val Gly Ala Ala Leu Phe Leu Phe Gln Gln Leu Ala
 370 375 380
 Gly Ile Asn Ala Val Val Tyr Tyr Ser Thr Ser Val Phe Arg Ser Ala
 385 390 395 400

Gly Ile Ala Ser Asp Val Ala Ala Ser Ala Leu Val Gly Ala Ala Asn
405 410 415

Val Phe Gly Thr Met Val Ala Ser Ser Leu Met Asp Lys Gln Gly Arg
420 425 430

Lys Ser Leu Leu Ile Thr Ser Phe Ser Gly Met Gly Ala Ser Met Leu
435 440 445

Leu Leu Ala Leu Ser Phe Thr Trp Lys Ala Leu Ala Pro Tyr Ser Gly
450 455 460

Thr Leu Ala Val Val Gly Thr Val Leu Tyr Val Leu Ser Phe Ala Leu
465 470 475 480

Gly Ala Gly Pro Val Pro Ala Leu Leu Leu Pro Glu Ile Phe Ala Ser
485 490 495

Arg Ile Arg Ala Lys Ala Val Ala Leu Ser Leu Gly Met His Trp Val
500 505 510

Ser Asn Phe Phe Ile Gly Leu Tyr Phe Leu Ser Val Val Ser Lys Phe
515 520 525

Gly Ile Ser Asn Val Tyr Leu Gly Phe Ala Ser Val Cys Ala Leu Ala
530 535 540

Val Leu Tyr Ile Ala Gly Asn Val Val Glu Thr Lys Gly Arg Ser Leu
545 550 555 560

Glu Glu Ile Glu Arg Glu Leu Ser Val Ala Glu
565 570

<210> 35
<211> 1953
<212> DNA
<213> Zea mays

<220>
<221> unsure
<222> (1584)
<223> n = A, C, G or T

<400> 35
ccttcctcct cgtcctcctt caggccagcg ggcaagaaga agaagaagaa aaatcaaggc 60
ttgcggcgag aggctgtgcc cggccgaccg gcgagcgagc ttcgtacgcg cgtcatgggt 120
ggcggcagca acagaggcgg cgccggcgcc ggcgaggaga gcggcagcga ccacgacggt 180
gtgctgcgga ggccgctgct caacacgggg agctgggtacc ggatgagctc gcggcagttc 240
agctttgccc cggggacctc ctccatggcc gtccctgcgc agtcccacgt ctccgccttc 300
ctctgcacgc tcatcgtcgc gctcggcccc atccagttcg gcttcaccag cggtctctcc 360
tccccgaccc aggacgccat ggttcgggac ctcaacctct ctatctccga gttctcggcg 420
ttcggatcgc tgtccaacgt cggcggcgat gtcggggcga tcgccagcgg gcagatggcc 480
gagtacattg gccgtaaagg gtcgttgatg attgctgcaa tcccaaatat catcggttgg 540
cttgcgatct cctttgcaaa agatgcctca tttctatata tgggacgatt gcttgaaggg 600
tttggtgtcg gcatcatatc ctacacggta ccggtataca tagcagagat atctcctcag 660
aacatgaggg gagctcttgg ttctgtgaac cagttgtctg tgacctttgg catattcttg 720
gcctatttgc tcggcatggt tattccttgg agacttcttg ctgtgattgg agccttgccc 780
tgcaaatgt tgattccttg actattcttc attccagaat ctcccagatg gctggcaaag 840
atgaatttga cggaagattg tgagacgtcc ctacaagtgc tgaggggggt tgagactgac 900

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atcacaacag aagtgaatga tataaagagg gcagtggcat catcaagtaa gaggaccaca 960
atcagttttc aagaattaaa ccaaaagaaa taccgcacgc cactacttct agggattggc 1020
ctacttgtag tgcaaaatct tagtggaatc aacgggtgtac tgttttatgc aagtagcatc 1080
ttcaaagctg caggggttac aaacagcgac ttggccacct gttcacttgg tgctattcag 1140
gtccttgcta ctggagttac aacatggctg ttagaccgag ctggacgacg catccttctc 1200
attatttcta cctctggcat gactctatgc cttcttgccg tttctgttgt attttttctc 1260
aaggataaca tttcacagga ttctaactca tactacatct taacaatgat ctcccttggt 1320
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atgtctgaga toctcccggt tagcatcaag agccttgccg gaagcatcgc aacactggcc 1440
aactggctga catccttcgc cataacaatg acgacgaact tgatgctcac gtggagtgtt 1500
ggaggcactt ttctctcgta catggttgtg agcgccctca ccatcgtttt tgttgtcctt 1560
tggttgccgg agacgaaggg gagnaactct agaggagata caattttcgt ttcgtgagc 1620
attcagcgtc agctgcaatg gttgcccgag tgtttatctt agggcctgtt tcgatcccat 1680
gagctaaagc aaaaagaagc taaaatttag tcactttata aactaaagtt ccaatcagga 1740
ggagctaaaa gtgaataaaa tagcaaaaga atatctttta gtcactttta gcttctaaag 1800
aggagctaga atttagtccc ttgttttagc ttatactcct tccatcctaa aaaaatatag 1860
gtctttctaa cttttctttt ttctgttcat attcattcga ataatagata atatagacat 1920
acgtataaac tattcattaa aaaaaaaaaa aaa 1953

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<210> 36
<211> 553
<212> PRT
<213> Zea mays

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<220>
<221> UNSURE
<222> (528)
<223> Xaa = ANY AMINO ACID

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<400> 36
Pro Ser Ser Ser Ser Phe Arg Pro Ala Gly Lys Lys Lys Lys Lys
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Lys Asn Gln Gly Leu Arg Arg Glu Ala Val Pro Gly Arg Pro Ala Ser
      20             25             30

Glu Leu Arg Thr Arg Val Met Gly Gly Gly Ser Asn Arg Gly Gly Ala
 35             40             45

Gly Ala Gly Glu Glu Ser Gly Ser Asp His Asp Gly Val Leu Arg Arg
 50             55             60

Pro Leu Leu Asn Thr Gly Ser Trp Tyr Arg Met Ser Ser Arg Gln Ser
 65             70             75             80

Ser Phe Ala Pro Gly Thr Ser Ser Met Ala Val Leu Arg Glu Ser His
      85             90             95

Val Ser Ala Phe Leu Cys Thr Leu Ile Val Ala Leu Gly Pro Ile Gln
      100            105            110

Phe Gly Phe Thr Ser Gly Phe Ser Ser Pro Thr Gln Asp Ala Met Val
      115            120            125

Arg Asp Leu Asn Leu Ser Ile Ser Glu Phe Ser Ala Phe Gly Ser Leu
      130            135            140

Ser Asn Val Gly Gly Met Val Gly Ala Ile Ala Ser Gly Gln Met Ala
      145            150            155            160

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Glu	Tyr	Ile	Gly	Arg	Lys	Gly	Ser	Leu	Met	Ile	Ala	Ala	Ile	Pro	Asn	
				165					170					175		
Ile	Ile	Gly	Trp	Leu	Ala	Ile	Ser	Phe	Ala	Lys	Asp	Ala	Ser	Phe	Leu	
			180					185					190			
Tyr	Met	Gly	Arg	Leu	Leu	Glu	Gly	Phe	Gly	Val	Gly	Ile	Ile	Ser	Tyr	
		195					200					205				
Thr	Val	Pro	Val	Tyr	Ile	Ala	Glu	Ile	Ser	Pro	Gln	Asn	Met	Arg	Gly	
	210					215					220					
Ala	Leu	Gly	Ser	Val	Asn	Gln	Leu	Ser	Val	Thr	Phe	Gly	Ile	Phe	Leu	
225					230					235					240	
Ala	Tyr	Leu	Leu	Gly	Met	Phe	Ile	Pro	Trp	Arg	Leu	Leu	Ala	Val	Ile	
				245					250					255		
Gly	Ala	Leu	Pro	Cys	Thr	Met	Leu	Ile	Pro	Gly	Leu	Phe	Phe	Ile	Pro	
			260					265					270			
Glu	Ser	Pro	Arg	Trp	Leu	Ala	Lys	Met	Asn	Leu	Thr	Glu	Asp	Cys	Glu	
		275					280					285				
Thr	Ser	Leu	Gln	Val	Leu	Arg	Gly	Phe	Glu	Thr	Asp	Ile	Thr	Thr	Glu	
	290					295					300					
Val	Asn	Asp	Ile	Lys	Arg	Ala	Val	Ala	Ser	Ser	Ser	Lys	Arg	Thr	Thr	
305					310					315					320	
Ile	Ser	Phe	Gln	Glu	Leu	Asn	Gln	Lys	Lys	Tyr	Arg	Thr	Pro	Leu	Leu	
			325					330						335		
Leu	Gly	Ile	Gly	Leu	Leu	Val	Leu	Gln	Asn	Leu	Ser	Gly	Ile	Asn	Gly	
			340					345					350			
Val	Leu	Phe	Tyr	Ala	Ser	Ser	Ile	Phe	Lys	Ala	Ala	Gly	Val	Thr	Asn	
		355					360					365				
Ser	Asp	Leu	Ala	Thr	Cys	Ser	Leu	Gly	Ala	Ile	Gln	Val	Leu	Ala	Thr	
	370					375					380					
Gly	Val	Thr	Thr	Trp	Leu	Leu	Asp	Arg	Ala	Gly	Arg	Arg	Ile	Leu	Leu	
385					390					395					400	
Ile	Ile	Ser	Thr	Ser	Gly	Met	Thr	Leu	Cys	Leu	Leu	Ala	Val	Ser	Val	
				405					410					415		
Val	Phe	Phe	Leu	Lys	Asp	Asn	Ile	Ser	Gln	Asp	Ser	Asn	Ser	Tyr	Tyr	
			420					425					430			
Ile	Leu	Thr	Met	Ile	Ser	Leu	Val	Gly	Ile	Val	Ser	Phe	Val	Ile	Thr	
		435					440					445				
Phe	Ser	Phe	Gly	Met	Gly	Ala	Ile	Pro	Trp	Leu	Met	Met	Ser	Glu	Ile	
	450					455					460					
Leu	Pro	Val	Ser	Ile	Lys	Ser	Leu	Gly	Gly	Ser	Ile	Ala	Thr	Leu	Ala	
465					470					475					480	

Asn Trp Leu Thr Ser Phe Ala Ile Thr Met Thr Thr Asn Leu Met Leu
 485 490 495
 Thr Trp Ser Val Gly Gly Thr Phe Leu Ser Tyr Met Val Val Ser Ala
 500 505 510
 Phe Thr Ile Val Phe Val Val Leu Trp Val Pro Glu Thr Lys Gly Xaa
 515 520 525
 Asn Ser Arg Gly Asp Thr Ile Phe Val Ser Leu Ser Ile Gln Arg Gln
 530 535 540
 Leu Gln Trp Leu Pro Glu Cys Leu Ser
 545 550

<210> 37
 <211> 740
 <212> PRT
 <213> Oryza sativa

<400> 37
 Met Ala Gly Ala Val Leu Val Ala Ile Ala Ala Ser Ile Gly Asn Leu
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 Leu Gln Gly Trp Asp Asn Ala Thr Ile Ala Gly Ala Val Leu Tyr Ile
 20 25 30
 Lys Lys Glu Phe Asn Leu Gln Ser Glu Pro Leu Ile Glu Gly Leu Ile
 35 40 45
 Val Ala Met Ser Leu Ile Gly Ala Thr Ile Ile Thr Thr Phe Ser Gly
 50 55 60
 Ala Val Ala Asp Ser Phe Gly Arg Arg Pro Met Leu Ile Ala Ser Ala
 65 70 75 80
 Val Leu Tyr Phe Val Ser Gly Leu Val Met Leu Trp Ala Pro Asn Val
 85 90 95
 Tyr Val Leu Leu Leu Ala Arg Leu Ile Asp Gly Phe Gly Ile Gly Leu
 100 105 110
 Ala Val Thr Leu Val Pro Leu Tyr Ile Ser Glu Thr Ala Pro Thr Asp
 115 120 125
 Ile Arg Gly Leu Leu Asn Thr Leu Pro Gln Phe Ser Gly Ser Gly Gly
 130 135 140
 Met Phe Leu Ser Tyr Cys Met Val Phe Gly Met Ser Leu Met Pro Gln
 145 150 155 160
 Pro Asp Trp Arg Ile Met Leu Gly Val Leu Ser Ile Pro Ser Leu Ile
 165 170 175
 Tyr Phe Ala Leu Thr Ile Phe Tyr Leu Pro Glu Ser Pro Arg Trp Leu
 180 185 190

Val Ser Lys Gly Arg Met Ala Glu Ala Lys Arg Val Leu Gln Gly Leu
 195 200 205
 Arg Gly Arg Glu Asp Val Ser Gly Glu Met Ala Leu Leu Val Glu Gly
 210 215 220
 Leu Gly Val Gly Lys Asp Thr Lys Ile Glu Glu Tyr Ile Ile Gly Pro
 225 230 235 240
 Asp Asp Glu Leu Ala Asp Glu Gly Leu Ala Pro Asp Pro Glu Lys Ile
 245 250 255
 Lys Leu Tyr Gly Pro Glu Glu Gly Leu Ser Trp Val Ala Arg Pro Val
 260 265 270
 His Gly Gln Ser Ala Leu Gly Ser Ala Leu Gly Leu Ile Ser Arg His
 275 280 285
 Gly Ser Met Val Ser Gln Gly Lys Pro Leu Val Asp Pro Val Val Thr
 290 295 300
 Leu Phe Gly Ser Val His Glu Lys Met Pro Glu Ile Met Gly Ser Met
 305 310 315 320
 Arg Ser Thr Leu Phe Pro Asn Phe Gly Ser Met Phe Ser Val Ala Glu
 325 330 335
 Gln Gln Gln Ala Lys Gly Asp Trp Asp Ala Glu Ser Gln Arg Glu Gly
 340 345 350
 Glu Asp Tyr Gly Ser Asp His Gly Gly Asp Asp Ile Glu Asp Ser Leu
 355 360 365
 Gln Ser Pro Leu Ile Ser Arg Gln Ala Thr Ser Val Glu Gly Lys Glu
 370 375 380
 Ile Ala Ala Pro His Gly Ser Ile Met Gly Ala Val Gly Arg Ser Ser
 385 390 395 400
 Ser Leu Met Gln Gly Gly Glu Ala Val Ser Ser Met Gly Ile Gly Gly
 405 410 415
 Gly Trp Gln Leu Ala Trp Lys Trp Thr Glu Arg Glu Gly Ala Asp Gly
 420 425 430
 Glu Lys Glu Gly Gly Phe Gln Arg Ile Tyr Leu His Glu Glu Gly Val
 435 440 445
 Thr Gly Asp Arg Arg Gly Ser Ile Leu Ser Leu Pro Gly Gly Asp Val
 450 455 460
 Pro Pro Gly Gly Glu Phe Val Gln Ala Ala Ala Leu Val Ser Gln Pro
 465 470 475 480
 Ala Leu Tyr Ser Lys Glu Leu Met Glu Gln Arg Leu Ala Gly Pro Ala
 485 490 495
 Met Val His Pro Ser Gln Ala Val Ala Lys Gly Pro Lys Trp Ala Asp
 500 505 510

Leu Phe Glu Pro Gly Val Lys His Ala Leu Phe Val Gly Ile Gly Ile
515 520 525

Gln Ile Leu Gln Gln Phe Ala Gly Ile Asn Gly Val Leu Tyr Tyr Thr
530 535 540

Pro Gln Ile Leu Glu Gln Ala Gly Val Gly Val Leu Leu Ala Asn Ile
545 550 555 560

Gly Leu Ser Ser Ser Ser Ala Ser Ile Leu Ile Ser Gly Leu Thr Thr
565 570 575

Leu Leu Met Leu Pro Ser Ile Gly Ile Ala Met Arg Leu Met Asp Met
580 585 590

Ser Gly Arg Arg Phe Leu Leu Leu Ala Thr Ile Pro Ile Leu Ile Val
595 600 605

Ala Leu Ala Ile Leu Ile Leu Val Asn Ile Leu Asp Val Gly Thr Met
610 615 620

Val His Ala Ser Leu Ser Thr Val Ser Val Ile Leu Tyr Phe Cys Phe
625 630 635 640

Phe Val Met Gly Phe Gly Pro Ile Pro Asn Ile Leu Cys Ala Glu Ile
645 650 655

Phe Pro Thr Thr Val Arg Gly Ile Cys Ile Ala Ile Cys Ala Leu Thr
660 665 670

Phe Trp Ile Gly Asp Ile Ile Val Thr Tyr Thr Leu Pro Val Met Leu
675 680 685

Asn Ala Ile Gly Leu Ala Gly Val Phe Gly Ile Tyr Ala Val Val Cys
690 695 700

Ile Leu Ala Phe Leu Phe Val Phe Met Lys Val Pro Glu Thr Lys Gly
705 710 715 720

Met Pro Leu Glu Val Ile Thr Glu Phe Phe Ser Val Gly Ala Lys Gln
725 730 735

Ala Lys Glu Asp
740

<210> 38
<211> 501
<212> PRT
<213> Oryza sativa

<400> 38
Met Ser Phe Arg Gly Glu Glu Ser Gly Gly Glu Asp Gly Gly Arg Thr
1 5 10 15

Ala Ser Ala Ser Asp Leu Arg Lys Pro Phe Leu His Thr Gly Ser Trp
20 25 30

Tyr Lys Met Ser Ser Ala Gly Gly Gly Gly Met Gly Ser Arg Leu
35 40 45

Gly Ser Ser Ala Tyr Ser Leu Arg Asp Ser Ser Val Ser Ala Val Leu
50 55 60

Cys Thr Leu Ile Val Ala Leu Gly Pro Ile Gln Phe Gly Phe Thr Cys
65 70 75 80

Gly Phe Ser Ser Pro Thr Gln Asp Ala Ile Ile Ser Asp Leu Gly Leu
85 90 95

Thr Leu Ser Glu Phe Ser Leu Phe Gly Ser Leu Ser Asn Val Gly Ala
100 105 110

Met Val Gly Ala Ile Ala Ser Gly Gln Ile Ala Glu Tyr Ile Gly Arg
115 120 125

Lys Gly Ser Leu Met Ile Ala Ala Ile Pro Asn Ile Ile Gly Trp Leu
130 135 140

Ala Ile Ser Phe Ala Lys Asp Ser Ser Phe Leu Phe Met Gly Arg Leu
145 150 155 160

Leu Glu Gly Phe Gly Val Gly Val Ile Ser Tyr Val Val Pro Val Tyr
165 170 175

Ile Ala Glu Ile Ala Pro Gln Thr Met Arg Gly Ala Leu Gly Ser Val
180 185 190

Asn Gln Leu Ser Val Thr Ile Gly Ile Leu Leu Ala Tyr Leu Leu Gly
195 200 205

Met Phe Val Pro Trp Arg Ile Leu Ser Val Leu Gly Ile Leu Pro Cys
210 215 220

Ser Ile Leu Ile Pro Gly Leu Phe Phe Ile Pro Glu Ser Pro Arg Trp
225 230 235 240

Leu Ala Lys Met Gly Lys Met Glu Asp Phe Glu Ser Ser Leu Gln Val
245 250 255

Leu Arg Gly Phe Glu Thr Asp Ile Ala Val Glu Val Asn Glu Ile Lys
260 265 270

Arg Ser Val Gln Ser Ser Arg Arg Arg Thr Thr Ile Arg Phe Ala Asp
275 280 285

Ile Lys Gln Lys Arg Tyr Ser Val Pro Leu Met Val Gly Ile Gly Leu
290 295 300

Leu Val Leu Gln Gln Leu Ser Gly Val Asn Gly Ile Leu Phe Tyr Ala
305 310 315 320

Ala Ser Ile Phe Lys Ala Ala Gly Leu Thr Asn Ser Asn Leu Ala Thr
325 330 335

Phe Gly Leu Gly Val Val Gln Val Val Ala Thr Gly Val Thr Thr Trp
340 345 350

Leu Thr Asp Lys Ala Gly Arg Arg Leu Leu Leu Ile Ile Ser Thr Thr
355 360 365

Gly	Met	Thr	Ile	Thr	Leu	Val	Val	Val	Ser	Val	Ser	Phe	Phe	Val	Lys
370						375					380				
Asp	Asn	Ile	Thr	Asn	Gly	Ser	His	Leu	Tyr	Ser	Val	Met	Ser	Met	Leu
385					390					395					400
Ser	Leu	Val	Gly	Leu	Val	Ala	Phe	Val	Ile	Ser	Phe	Ser	Leu	Gly	Leu
			405						410					415	
Gly	Ala	Ile	Pro	Trp	Ile	Ile	Met	Ser	Glu	Ile	Leu	Pro	Val	Asn	Ile
			420					425						430	
Lys	Ser	Leu	Ala	Gly	Ser	Val	Ala	Thr	Leu	Ala	Asn	Trp	Leu	Thr	Ala
	435						440					445			
Trp	Leu	Ile	Thr	Met	Thr	Ala	Ser	Leu	Met	Leu	Ser	Trp	Ser	Asn	Gly
450						455					460				
Gly	Thr	Phe	Ala	Ile	Tyr	Ala	Ala	Val	Cys	Ala	Gly	Thr	Leu	Val	Phe
465					470					475					480
Val	Cys	Leu	Trp	Val	Pro	Glu	Thr	Lys	Gly	Arg	Thr	Leu	Glu	Glu	Ile
				485					490					495	
Ala	Phe	Ser	Phe	Arg											
			500												